

BIBLIOGRAPHICAL RECORD.

Authors and societies are requested to forward their works to the editors as soon as published. The date of publication, given in brackets [], marks the time at which the work was received, unless an earlier date of publication is known to recorder or editor.

A colon after initial designates the most common given name, as: A: Augustus; B: Benjamin; C: Charles; D: David; E: Edward; F: Frederic; G: George; H: Henry; I: Isaac; J: John; K: Karl; L: Louis; M: Mark; N: Nicholas; O: Otto; P: Peter; R: Richard; S: Samuel; T: Thomas; W: William. The initials at the end of each record, or note, are those of the recorder, and will be explained at the end of each volume. Unless otherwise stated each record is made directly from the work that is noticed.

When there are not sufficient titles of current papers to fill the space allotted to the Record, earlier entomological publications will be recorded. In this way it is expected to include, finally, in the Record, all titles of papers not included in Hagen's *Bibliotheca entomologica*, which treat of North American or general entomology, and all papers on entomology published in North America.

Corrections of errors and notices of omissions are solicited.

Association française pour l'avancement des sciences — Congrès de Montpellier, Section de zoologie. [Abstract of proceedings, by Adrien Dollfus.] (Feuille des jeunes naturalistes, 1 Dec. 1879, p. 17-21.)

Jules Lichtenstein (p. 19-20) on some of the peculiarities of the reproduction of the *aphidee*. G: D. (1488)

Barber, S. Habits of animals in relation to the weather. (Monthly Journ. sci., Nov. 1879, s. 3, v. 1, p. 728-731, 1 fig.)

Figures a spider's web spun between four lighted candles; other notes on habits of species of *araneae*. G: D. (1489)

Bee ranching in California. (Springfield [Mass.] d. republican, 5 Sept. 1879, p. 2, col. 6, 12 cm.) From *Sunday afternoon*. G: D. (1490)

Brunner von Wattenwyl, Carl. Monographie der Phaneropteriden. Herausgegeben von der k. k. zoologisch-botanischen Gesellschaft in Wien. Mit 8 Tafeln. Wien, 1878. t.-p. + 401 p., 22.5 × 14, t 16 × 10.5; 8 pl., 27 × 22.5, t 24.5 × 18.

405 species divided into 115 genera and 39 groups, all except groups described in Latin. 49 of the genera are represented by a single species each. 62 of the species, belonging to 23 genera, are North American, but only 17 species (7 new) belonging to 5 genera (*dichopetala* = 1 new) are recorded north of Mexico; of these 5 genera, 2, with 5 + 3 species, are peculiar to the U. S., one only of the species occurring also in Mexico. Each genus (except *oxyprora* n. g.) is represented on the plate by a single species. The nomenclature of the neuration is discussed in the introduction, and the work is preceded by a division of the Locustarians into 14 tribes, and a table to find the genera described in the work, also in Latin. S: H. S. (1491)

Cook, Albert J. Bees improved by breeding. (Amer. bee Journ., 1879, v. 15, p. 34.)

The same principles apply to the breeding of bees that are practiced in improving our higher animals. A: J: C. (1492)

Failla-Tedaldi, L. Note sur une invasion de la *vanessa cardui* L. observée en Sicile. (Feuille des jeunes naturalistes, March 1879, p. 64-65.)

Observations on swarming. G: D. (1493)

K., J. D. Vol de libellules. (Feuille des jeunes naturalistes, Nov. 1879, p. 15.)

Records great flight of dragon-flies near Havre, France, 7 Oct. 1879. G: D. (1494)

Northern range of *cermatia forceps*. (Amer. nat., Nov. 1879, v. 13, p. 711.)

C. forceps taken in Mass. and N. H. G: D. (1495)

Saunders, W. *Papilio cressphontes*. (Can. entom., Dec. 1879, v. 11, p. 240.)

Occurrence of *p. cressphontes* at Hamilton, Ont., and at Theford, Ont., feeding on *dictamnus fraxinella* and *zanthoxylum americanum*. B: P. M. (1496)

Siewers, C. Godfrey. The brushes of the white-marked tussock moth, *orygia leucostigma*, Smith & Abbot. (Valley naturalist, 1878, v. 1, p. 9.)

These brushes are used to cleanse the "beauty spots" on the hinder segments. B: P. M. (1497)

Southern Illinois normal university, Carbondale, Ill. 5th annual report of the principal [Robert Allyn] to the board of trustees. Carbondale, Ill., 1879. 44 p., 21 × 13.

Contains (p. 25-42), "Report of the curator of the museum," by G: Hazen French. B: P. M. (1498)

Turner, H. Stratagem of a wasp. (Amer. nat., Nov. 1879, v. 13, p. 710.)

A wasp leads up a tree by one of the antennae, a roach, probably previously stung. G: D. (1499)

Weiss, J. Crickets. (Atlantic monthly, Oct. 1877, v. 40, p. 467-468.)

In verse. G: D. (1500)

NECROLOGY FOR 1879.

Brandt, Johann Friedrich. [Biog. notices.] (Zool. Anzeiger, jahrg. 2, 8 Sept. 1879, p. 480; 20 Oct. 1879, p. 529.) (Botanische Zeitung, 14 Nov. 1879, jahrg. 37, p. 743.)

Dr. Brandt was b. 25 May 1802, in Jüterbogk, Prussia, and d. 15 July 1879, at Merekull near Narva, Russia. He was Prof. of Zool. at St. Petersburg, Russia, from 1834 until his death. G: D. (1501)

Chapman, T. [Biog. notice.] (Zool. Anzeiger, 17 Nov. 1879, jahrg. 2, p. 600.)

B. 22 Jan. 1816 in Nottingham, England; d. 27 Aug. 1879, in Burghill, Hereford, England. Spent much of life in Glasgow, where he studied the entomological fauna of Scotland. *G: D.* (1502)

Chapuis, Félicien. [Biog. notices.] (Naturae novitates, Oct. 1879, no. 20, p. 199.) (Zool. Anzeiger, 17 Nov. 1879, jahrg. 2, p. 600.)

[Biog. sketch by Dr. E. Candèze.] (Comptes rendus soc. entom. Belge, 4 Oct. 1879, s. 2, no. 69, p. 1-4.)

Dr. Chapuis, coleopterist, was b. in 1824, in Verviers, Belgium, where he afterwards practiced medicine. He d. in Hensy near Verviers, 30 Sept. 1879. *G: D.* (1503)

Chavannes, Auguste. [Biog. notice.] (Zool. Anzeiger, 6 Oct. 1879, jahrg. 2, p. 528.)

Dr. Chavannes, Prof. honor. de l'Académie de Lausanne, an entomological writer, d. 16 Sept. 1879, at Lausanne, Switzerland. *G: D.* (1504)

Chenu, Jean Charles. [Biog. note.] (Bost. d. advert., 17 Nov. 1879, no. 22223, p. 134, no. 73, 2 cm.)

Dr. Chenu was b. in 1808, in Metz, France; d. Nov. 1879. "... From 1830 to 1861 he was engaged with others in publishing an 'Encyclopédie d'histoire naturelle,' a work which made thirty-one volumes."—*Bost. d. advert.* *B: P. M.* (1505)

Fedrizzi, Giacinto. [Biog. note.] (Naturae novitates, Feb. 1879, no. 3, p. 47.)

Dr. Fedrizzi, an entomological writer, d. in Padua, Italy, in 1879. *G: D.* (1506)

Fitch, Asa. [Biog. notices.] (Amer. nat., Dec. 1879, v. 13, p. 798.)

[Biog. sketch by E. P. Thurston, entitled "Sketch of Dr. Asa Fitch."] (Pop. sci. mo., Nov. 1879, v. 16, p. 116-120, por.)

Dr. Fitch was b. at Salem, Washington Co., N. Y., 24 Feb. 1809, and d. there 8 Apr. 1879. In 1826 he went to the Rensselaer School at Troy, N. Y.; in 1829 was graduated from the Rutgers Medical College in New York city; in 1854 was appointed N. Y. State Entomologist, and held the latter position for 17 years. *E: B.* (1507)

Gastaldi, Bartolomeo. [Biog. notices.] (Naturae novitates, Feb. 1879, no. 4, p. 57.) (Zool. Anzeiger, 21 April 1879, jahrg. 2, p. 216.)

Dr. Gastaldi, Prof. Geol. and Palaeont., Director of the Museo Civico, in Turin, Italy, was b. 10 Feb. 1818, in Turin; d. 5 Feb. 1879, in Turin. *G: D.* (1508)

Gervais, Paul. [Biog. notices.] (Naturae novitates, March 1879, no. 5, p. 67.) (Zool. Anzeiger, 10 March 1879, jahrg. 2, p. 144.) (Amer. nat., April 1879, v. 13, p. 275-276.)

M. Gervais, Prof. of Comparative Anatomy at the Musée d'histoire naturelle, was b. 26 Sept. 1816, in Paris; d. 10 Feb. 1879, in Paris. *G: D.* (1509)

Loew, Hermann. [Biog. notices.] (Zool. Anzeiger, 23 June 1879, jahrg. 2, p. 336.) (Amer. nat., Dec. 1879, v. 13, p. 798.)

Dr. Loew, the dipterist, was b. 7 July 1807, in Weissenfels, Prussia; d. 21 April 1879, in Halle on the Saale, Prussia. *G: D.* (1510)

Moncreiffe, T. [Biog. notices.] (Naturae novitates, Aug. 1879, no. 17, p. 174.) (Zool. Anzeiger, 8 Sept. 1879, jahrg. 2, p. 480.)

[Biog. sketch by F. Buchanan White, entitled, "In memoriam Sir Thomas Moncreiffe, Bart."] (Scottish naturalist, Oct. 1879, p. 145-148, por.)

Sir T. Moncreiffe, of Moncreiffe, Scotland, President of the Perthshire Society of Natural History, and of the Cryptogamic Society of Scotland, a lepidopterist, d. 16 Aug. 1879. *G: D.* (1511)

Moquerys, S. [Biog. note.] (Naturae novitates, April 1879, no. 7-8, p. 92.)

M. Moquerys, coleopterist, d. 12 Feb. 1879, at Rouen, France, aged 87. *G: D.* (1512)

Pictet, Édouard. [Biog. notices.] (Nature, 22 May 1879, v. 20, p. 88, 6 cm.) (Naturae novitates, June 1879, no. 12, p. 135.)

Neuropterist; d. in 1879, in Geneva, aged 44. *G: D.* (1513)

Reichenbach, Heinrich Gottlieb Ludwig. [Biog. notices.] (Naturae novitates, April 1879, no. 7-8, p. 92.) (Zool. Anzeiger, 7 April 1879, jahrg. 2, p. 192.)

[Notice, by Friedrich, entitled "Necrolog H. G. L. Reichenbachs."] (Sitzungsber. d. natur. Gesellsch. Isis zu Dresden, Jan.-June 1879, p. 97-104.)

Dr. Reichenbach, Prof. of Natural History at Dresden, was b. in 1793 in Leipzig; d. 17 March 1879, in Dresden, Saxony. *G: D.* (1514)

Rondani, Camillo. [Biog. notices.] (Naturae novitates, Oct. 1879, no. 21, p. 207.) (Zool. Anzeiger, 17 Nov. 1879, jahrg. 2, p. 600.)

Prof. Rondani, dipterist, d. 18 Sept. 1879, in Parma, Italy, aged 72. *G: D.* (1515)

Saunders, W: Wilson. [Biog. notices.] (Naturae novitates, Sept. 1879, no. 19, p. 190.) (Botanische Zeitung, 14 Nov. 1879, jahrg. 37, p. 743.) (Amer. nat., Dec. 1879, v. 13, p. 798.)

Botanist and entomologist, b. in Little London, near Wendover, Buckinghamshire, England, 4 June 1809; d. at Raystead, Worthing, 13 Sept. 1879. *G: D.* (1516)

Smith, F. [Biog. notices.] (Psyche advertiser, March 1879, p. 7.) (Zool. Anzeiger, 24 March 1879, jahrg. 2, p. 168.) (Naturae novitates, March 1879, no. 6, p. 81.) (Can. entom. April 1879, v. 11, p. 78.) (Naturalist [Yorkshire], April 1879, p. 138.) (Entom. m. mag., April 1879, v. 15, p. 263-264.)

[Biographical notice, by J. W. Dunning.] (Entomologist, April 1879, v. 12, p. 89-92.)

Mr. Smith, Assistant Keeper Zool. Dept. British Museum, hymenopterist, b. in 1805, in London; d. 16 Feb. 1879, in London. *G: D.* (1517)

White, Adam. [Biog. notices.] (Zool. Anzeiger, 17 Feb. 1879, jahrg. 2, p. 96.) (Psyche advertiser, March 1879, p. 7.)

Mr. White was b. 29 April 1817, in Edinburg, Scotland; d. 4 Jan. 1879, in Glasgow, Scotland. He was in the Entom. Dept. British Museum from 1835 to 1863. *G: D.* (1518)